

ARTICLE 5

Submitted by: Clint Richmond, Claire Stampfer

Summary:

Polystyrene foam is perhaps the most unsustainable form of packaging and food serviceware. This is one of the reasons it was the first type of plastic to be restricted at the local level, back in 1987. Since then many communities have successfully banned it, including Brookline in 2012. However, this bylaw has some loopholes that can now be closed as they have been in neighboring Cambridge and other Massachusetts communities in the last four years. Furthermore, we need to extend this to a broader range petrochemical plastics that can be as harmful. This article seeks to push more strongly for sustainable packaging.

Problems with Petrochemical Plastics

1. The production of single-use plastic containers and packaging made from fossil fuels is not sustainable

Single-use containers are not the highest and best use of non-renewable fossil fuels. Our goal is to reduce unnecessary plastic packaging, as we have done in recent by-laws for bottled water and plastic shopping bags. We can't keep fossil fuels in the ground if fossil fuels are also being used for plastic. While Brookline and other communities have made

²⁵ Eriksen, M, Mackay, J, Ross, H. 2012. *The Tobacco Atlas*, Fourth Edition, American Cancer Society, Chapter 29, p. 80. Retrieved from: www.TobaccoAtlas.org.

²⁶ Chaloupka, FJ & L Riccardo Pacula, R. NIH, NCI. 2001. *The Impact of Price on Youth Tobacco Use, Smoking and Tobacco Control Monograph 14*: 193 – 200. Retrieved from: http://cancercontrol.cancer.gov/brp/tcrb/monographs/14/m14_12.pdf.

²⁷ US Department of Treasury. Alcohol and Tobacco Tax and Trade Bureau (TTB). 2011. *Statistical Report – Tobacco* (2011) (TTB S 5210-12-2010). Retrieved from: <http://www.ttb.gov/statistics/2010/201012tobacco.pdf>.

²⁸ Druzik et al v. Board of Health of Haverhill, 324 Mass.129 (1949).

progress in the last four years, over the coming decades global plastic production is slated to increase nearly sixfold.

2. Solid waste problems

The enormous number of plastic packaging is difficult to manage.

Even if only a small percentage of the volume becomes litter, this causes a large amount of visual blight and animal harm. Plastic pollution is most acute in the marine environment. Hundreds of marine animal species suffer injury and death. In some cases, the *majority* of the population of a species have been affected (such as for whales).

Plastics are light, but occupy disproportionate space in recycling trucks and landfills.

These problems are compounded since bottles do not biodegrade. Such plastics can persist for 1000 years. However, they are subject to fragmentation, and may enter our human food chain.

Plastic suffers from low recycling rates compared to valuable natural materials like paper or aluminum. The Town actually loses money on plastic. Contamination makes them unsuitable for food or medical applications. Contaminants include additives and dyes; and the synthetic non-degradable adhesive (also made from petrochemicals) used to attach any label. Plastics are downcycled into non-recyclable products such as fleece or carpet. The label or other design elements can be printed with ink reducing its already extremely low value.

3. Plastic containers are bad for human health

Satisfying the demand for the raw materials of plastics is one of the causes of the growth of fracking. Concerns around fracking include the exposure to toxic fracking chemicals, water use and pollution, and the generation of huge volumes of toxic liquid waste.

Some plastics such as PETE and PVC are a more harmful than others, and create greater potential occupational and environmental hazards (including accidental releases).

A further compromise to our health begins when food is placed in a plastic container. The industry is not required to list additives to plastics, which can migrate from the container into the liquids and be ingested by consumers. These can include:

- Phthalates - a class of plasticizer added to increase flexibility, which is also a hormonal disrupter.
- Benzophenone - an ultraviolet blocker to prevent photo-degradation especially of clear plastics.

In addition, there are:

- impurities and contaminants from the manufacturing process such as antimony (a polymerization catalyst), and
- degradation products (such as acetaldehyde from PETE when exposed to heat or the sun's ultraviolet rays).

Sustainable Packaging

The most sustainable packaging uses natural materials such as paper, cloth and aluminum. Such materials are biodegradable, compostable, or recyclable. We also want to encourage the use of re-usable solutions. This by-law will provide an opportunity to educate retailer and consumers about sustainable options.

Why revisit the polystyrene by-law?

The existing by-law contains an exemption for certain types of foodware that are no longer justifiable such as straws, sitrrers and utensils.

Then there are the issues from some replacements for polystyrene. While many retailers have substituted sustainable packaging, in many cases they have simply shifted from polystyrene to other petrochemical plastics such as PETE and polypropylene. While polystyrene is perhaps the most harmful to humans, this does not fully mitigate the health or solid waste impacts.

Summary

This bylaw is based on successful ordinances in Oakland in sustainable packaging, and San Francisco in the retail sale of polystyrene. Locally, Williamstown has a similar by-law.

The bylaw does three things starting on Jan. 1, 2018:

1. Allows only sustainable food packaging. This is divided into two phases. Phase one bans two of the most harmful starting in 2018: polystyrene and PETE. There is a phase-in period of two years (2019) for less harmful recyclable petrochemical plastics (polyethylene and polypropylene).
2. Prohibits the sale of polystyrene foodware in Town.
3. Prohibits the sale of polystyrene foam packaging in Town such as peanuts and single-use coolers.

We urge Town Meeting to take close the loopholes, and stay in the vanguard in the state on this highly visible issue.

ARTICLE 5

Submitted by: Clint Richmond, Claire Stampfer

To see if the Town will amend Article 8.32 of the General By-Laws as follows (additions appear in underlined text, and deletions appear in stricken text):

Article 8.32

Sustainable~~Prohibition on the Use of Polystyrene-Based Disposable Food Containers and~~
Packaging

~~Effective December 1, 2013, polystyrene food or beverage containers shall not be used in the Town of Brookline to package or serve food or beverages if that packaging takes place on the premises of food service establishments, as defined in Article 8.10.2, within the Town of Brookline.~~

~~In the event that compliance with the effective date of this by-law is not feasible for a food service establishment because of either unavailability of alternative non-polystyrene containers or economic hardship, the Director of Health and Human Services may grant a waiver of not more than six months upon application of the owner or the owner's representative. The waiver may be extended for one (1) additional 6 month period upon the showing of continued infeasibility as set forth above.~~

~~And by adding a reference to this Article 8.32 in the General By-Laws, Article 10.2 Prosecutions and Enforcement, by including Article 8.32 under the list of by-laws enforceable by the Director of Health and Human Services.~~

Section 1: DEFINITIONS

The following words and phrases shall, unless context clearly indicates otherwise, have the following meanings:

BIODEGRADABLE Entirely made of organic materials such as wood, paper, bagasse or cellulose; or bioplastics that meet the American Society for Testing and Materials (ASTM) D7081 standard for Biodegradable Plastics in the Marine Environment. Any ASTM D7081 product must be clearly labeled with the applicable standard.

COMPOSTABLE Refers to bioplastic materials certified to meet the American Society for Testing and Materials International Standards D6400 or D6868, as those standards may be amended. ASTM D6400 is the specification for plastics designed for compostability in municipal or industrial aerobic composting facilities. D6868 is the specification for aerobic compostability of plastics used as coatings on a compostable substrate. Any compostable product must be clearly labeled with the applicable standard.

DISPOSABLE FOOD SERVICE WARE All food and beverage containers, bowls, plates, trays, cartons, cups, lids, straws, stirrers, forks, spoons, knives, film wrap, and other items designed for one-time or non-durable uses on or in which any food vendor directly places or packages prepared foods or which are used to consume foods. This includes, but is not limited to, service ware for takeout foods and leftovers from partially consumed meals prepared at food establishments.

DIRECTOR refers to the Director of the Department of Public Health or its designee.

FOOD ESTABLISHMENT An operation that stores, prepares, packages, serves, vends, or otherwise provides food for human consumption. This includes without limitation restaurants and food trucks.

PACKING MATERIAL means polystyrene foam used to hold, cushion, or protect items packed in a container for shipping, transport, or storage. This includes, for example, packing "peanuts"; and shipping boxes, coolers, ice chests, or similar containers made, in whole or in part, from polystyrene foam that is not wholly encapsulated or encased within a more durable material.

POLYSTYRENE means and includes (1) blown polystyrene and expanded and extruded foams (sometimes called "Styrofoam," a Dow Chemical Co. trademarked form of insulation) also referred to as expanded polystyrene (EPS); and in this chapter is referenced as "Foam Polystyrene." Foam Polystyrene is generally used to make opaque cups, bowls, plates, trays, clamshell containers, meat trays and egg cartons. The term also means and includes (2) clear or solid polystyrene, which is also known as "oriented," and referenced in this chapter as "Rigid Polystyrene." "Rigid Polystyrene" is generally used to make clear clamshell containers, cups, plates, straws, lids and utensils.

PREPARED FOOD Food or beverages, which are served, packaged, cooked, chopped, sliced, mixed, bottled, frozen, squeezed or otherwise prepared on the food establishment's premises within the Town, regardless whether it is eaten either on or off the premises.

RECYCLABLE Material that can be sorted, cleansed, and reconstituted using the Brookline curbside municipal collection programs for the purpose of using the altered form in the manufacture of a new product. "Recycling" does not include burning, incinerating, converting, or otherwise thermally destroying solid waste.

RETAIL ESTABLISHMENT Any commercial business facility that sells goods directly to the consumer including but not limited to grocery stores, pharmacies, liquor stores, convenience stores, restaurants, retail stores and vendors selling clothing, food, and personal items, and dry cleaning services.

REUSABLE Products that will be used more than once in its same form by a food establishment. Reusable food service ware includes: tableware, flatware, food or beverage containers, packages or trays, such as, but not limited to, soft drink bottles and milk containers that are designed to be returned to the distributor and customer that is provided take-out containers. Reusable materials include aluminum and glass. Reusable also includes cleanable durable containers, packages, or trays used on-premises or returnable containers brought back to the food establishment.

Section 2. PROHIBITED USE AND DISTRIBUTION OF POLYSTYRENE PRODUCTS

Starting January 1, 2018:

- (a) Food establishments are prohibited from providing prepared food to customers using polystyrene or polyethylene terephthalate food service ware.
- (b) All food establishments using any disposable food service ware will use biodegradable, compostable, reusable or recyclable food service ware. All food establishments are strongly encouraged to use reusable food service ware in place of using disposable food service ware for all food served on premises.
- (c) Retail establishments are prohibited from selling or distributing foam polystyrene or rigid polystyrene food service ware to customers.
- (d) Retail establishments are prohibited from selling or distributing polystyrene foam packing material to customers.

Starting January 1, 2019:

(e) Food establishments are prohibited from providing prepared food to customers using any food service ware made of polystyrene, polyethylene terephthalate, high and low density polyethylene, polyvinyl chloride food or polypropylene.

Section 3. EXEMPTIONS

(ii) (a) Foods prepared or packaged outside the Town are exempt from the provisions of this chapter.

(iii) (b) Food establishments and retail establishments will be exempted from the provisions of this chapter for specific items or types of disposable food service ware if the Department of Health or its designee finds that a suitable biodegradable, compostable, reusable, or recyclable alternative does not exist for a specific application and/or that imposing the requirements of this chapter on that item or type of disposable food service ware would cause undue hardship.

(iv) (c) Any establishment may seek an exemption from the requirements of this chapter by filing a request in writing with the Department of Health or its designee. The Department of Health or its designee may waive any specific requirement of this chapter for a period of not more than one year if the establishment seeking the exemption has demonstrated that strict application of the specific requirement would cause undue hardship. For purposes of this chapter, an "undue hardship" is a situation unique to the food establishment where there are no reasonable alternatives to the use of expanded polystyrene disposable food service containers and compliance with this provision would cause significant economic hardship to that food establishment. An establishment granted an exemption must re-apply prior to the end of the one-year exemption period and demonstrate continued undue hardship if the establishment wishes to have the exemption extended. The Health Department's decision to grant or deny an exemption or to grant or deny an extension of a previously issued exemption shall be in writing and shall be final.

(v) Section 4. PENALTIES AND ENFORCEMENT

(vi) (a) Each permittee as defined above, operating in the Town of Brookline shall comply with this by-law.

(vii) (1) If it is determined that a violation has occurred the Director shall issue a warning notice to the permittee for the initial violation.

(viii) (2) If an additional violation of this by-law has occurred within one year after a warning notice has been issued for an initial violation, the Director shall issue a notice of violation and shall impose a penalty against the permittee.

(ix) (3) The penalty for each violation that occurs after the issuance of the warning notice shall be no more than:

1. A) \$50 for the first offense

2. B) \$100 for the second offense and all subsequent offenses. Payment of such fines may

be enforced through civil action in the Brookline District Court.

(x) (4) No more than one (1) penalty shall be imposed upon a permittee within a seven (7) calendar day period.

(xi) (5) A permittee shall have fifteen (15) calendar days after the date that a notice of violation is issued to pay the penalty.

(xii) **Section 5. SEVERABILITY**

(xiii) Each section of this chapter shall be construed as separate to the end that if any section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of that chapter and all other chapters shall continue in full force.

Or take any other action relative thereto.

ARTICLE 6

Submitted by: Clint Richmond, Andrew Fischer

Summary:

Brookline passed the first law specifically addressing plastic shopping bags in the Commonwealth in 2012. Since then 33 other communities have successfully banned them. In particular, there is a contiguous group of communities that includes Brookline, Cambridge, Somerville, Newton, Watertown and Wellesley. However, our pioneering bylaw had some loopholes that can now be closed as they have been especially in neighboring Cambridge and other Massachusetts communities. This article also seeks to be more comprehensive by addressing paper and produce bags.

Problems with Petrochemical Plastics

The executive director of the U.N. Environment Programme, Achim Steiner, said in 2009 that "There is simply zero justification for manufacturing plastic bags anymore, anywhere." Here are the reasons why:

4. The production of single-use plastic bags made from fossil fuels is not sustainable

Single-use bags are not the highest and best use of non-renewable fossil fuels. Our overall goal is to reduce unnecessary petrochemical plastic packaging. We can't keep fossil fuels in the ground if fossil fuels are also being used for plastic.

5. Solid waste problems

The enormous number of plastic bags makes them difficult to manage.

Even if only a small percentage of the volume becomes litter, this causes a large amount of visual blight and animal harm. Plastic pollution is most acute in the marine environment. Hundreds of marine animal species suffer injury and death. In some cases, the *majority* of the population of a species have been affected (such as for whales). The World Economic Forum published a study this year stating that there will be as much plastic as fish in the ocean by 2050. Commenting on the report, the CEO of the Plastic Pollution Coalition said "One of the biggest problems [to] focus on is single use and disposable plastic."

These problems are compounded since petrochemical plastics do not biodegrade. Such plastics can persist for 1000 years. However, they are subject to fragmentation, and may enter our human food chain.

Plastic bags are not easily recycled and suffer from especially low recycling rates compared to valuable natural materials like paper. Pre- and post-consumer contamination makes them unsuitable for food or medical applications. Intentional contaminants include additives and dyes. Plastics are generally downcycled into non-recyclable products such as plastic lumber. The printing inks reduce its already extremely low value.

6. Plastic packaging is bad for human health

Satisfying the demand for the raw materials of plastics is one of the causes of the growth of fracking. Concerns around fracking include the exposure to toxic fracking chemicals, water use and pollution, and the generation of huge volumes of toxic liquid waste.

The industry is not required to list additives to plastics, which can migrate from the bag into the contents and be ingested by consumers. These chemicals include dyes and copolymers. In addition, there are chemical impurities and contaminants from the manufacturing process.

Sustainable Bags

The most sustainable packaging uses natural materials such as paper or cloth. Such materials are biodegradable, compostable, and recyclable. We also want to encourage the use of re-usable solutions. This by-law will provide an opportunity to educate retailer and consumers about more sustainable options.

Why revisit the bag by-law?

The existing by-law contained deliberate exemptions modeled on the proposed state law at the time such as a small store exemption. While many retailers have substituted sustainable packaging, others (such as CVS and Pier 1) have simply adopted marginally thicker polyethylene bags (which use more fossil fuels and weigh more) that were counter to the intent of the law.

Summary

The bylaw does several things:

4. Applies the by-law equally to all stores as in most laws passed in the state since ours.
5. Defines re-usable plastic bags more robustly as in nearly every other law passed in the state since ours. This also includes eliminating polyvinyl chloride, a more toxic plastic than polyethylene or polypropylene.
6. Closes the loophole for petrochemical plastic produce bags. This is similar to the Williamstown by-law. The law will allow compostable plastic produce bags, which are readily available.
7. Makes paper bags more sustainable by requiring a minimum of 40% post-consumer recycled content as in Cambridge, Newton and most laws in California. Because of prior laws, these bags are readily available.

This by-law cannot impose a fee on paper or other single-use bags as has been done in other communities (most notably Cambridge). In Massachusetts, this right is reserved for cities (and has been confirmed by the Attorney General). However, retailers have always had the right to charge for bags, and we support retailers who wish to do so or otherwise provide incentives such as rebates when you bring your own bag.

We urge Town Meeting to close the loopholes, and make the other proposed improvements. In doing so we will stay in the vanguard in the state on this highly visible issue.

ARTICLE 6

Submitted by: Clint Richmond, Andrew Fischer

To see if the Town will amend the General By-Laws by revising the Article 8.33 as follows (additions are indicated in underlining, and deletions are indicated in strike-out):

ARTICLE 8.33 SUSTAINABLE PLASTIC BAGS ~~REDUCTION~~

SECTION 8.33.1 Definitions

The following words shall, unless the context clearly requires otherwise, have the following meanings:

~~“Director/Officer”, the Director of Public Health Services~~ Town Administrator or his/her designees responsible for enforcement.

“ASTM D6400”, the American Society for Testing and Materials (ASTM) International “Standard Specification for Compostable Plastics”.

“ASTM D7081”, ASTM International “Standard Specification for Biodegradable Plastics in the Marine Environment”.

“Checkout bag”, a carryout bag provided by a store to a customer at the point of sale. ~~Checkout bags shall not include bags, whether plastic or not, in which loose produce or products are placed by the consumer to deliver such items to the point of sale or check out area of the store.~~

“Compostable plastic bag”, a plastic bag that (1) conforms to the current ASTM D6400 for compostability; (2) is certified and labeled as meeting the ASTM D6400 standard

specification by a recognized verification entity; and (3) conforms to any other standards deemed acceptable by this section.

~~“Department”, the Brookline Department of Public Health.~~

“Marine degradable plastic bag”, a plastic bag that conforms to the current ASTM D7081 standard specification for marine degradability; and conforms to any other standards deemed acceptable by the OfficerDirector, provided additional, OfficerDirector-approved standards are as stringent as ASTM D7081.

“Product Bag” bags in which loose produce, bulk items, unwrapped baked goods or prepared food, or other products are placed by the consumer to deliver such items to the point of sale or check out area of the store.

“Reusable bag”, a bag that is either (a) made of cloth or other machine washable fabric; or (b) made of plastic other than polyethylene or polyvinyl chloride that is durable, non-toxic, and generally considered a food-grade material that is more than 4 mils thick.

“Reusable check-out bag”, a sewn reusable bag with stitched handles that is specifically designed for multiple reuse and is either (1) made of cloth or other machine washable fabric; or (2) made of durable plastic that is at least 2.25 mils thick; or (3) made of other durable material can carry 25 pounds over a distance of 300 feet.

“Recyclable Paper Bag” means a paper bag that is (1) 100 percent recyclable including the handles; (2) contains at least 40% post-consumer recycled paper content; and, (3) displays the words “recyclable” and “made from 40% post-consumer recycled content” (or other applicable amount) in a visible manner on the outside of the bag.

“Retail establishment”, any retail space located in the City including without limitation a restaurant, food or ice cream truck, convenience store, retail pharmacy, or supermarket, store that satisfies at least one of the following requirements: (a) a retail space of 2,500 square feet or larger or at least three (3) locations under the same name within the Town of Brookline that total 2,500 square feet or more; or (b) a retail pharmacy with at least two locations under the same ownership within the Town of Brookline; or (c) a full-line, self-service supermarket that had annual gross sales in excess of \$1,000,000 during the previous tax year, and which sells a line of dry grocery, canned goods or nonfood items and some perishable items;

SECTION 8.33.2

(a) If a retail establishment as defined in Section 1 provides plastic checkout bags to customers, the plastic bags shall comply with the requirements of being either a recyclable paper bag, a reusable checkout bag, or a compostable plastic bags that is compostable, as well as marine degradable plastic bags.

(b) If a retail establishment provides product bags to customers, the bags shall comply with the requirements of being either a recyclable paper bag, reusable bag, or a compostable plastic bag.~~(a) Nothing in this section shall be read to preclude any~~

~~establishment from making reusable checkout bags available for sale to customers or utilizing recyclable paper bags as defined in this section at checkout.~~

(c) The ~~Director~~ Officer may promulgate rules and regulations to implement this section.

SECTION 8.33.3 PENALTIES AND ENFORCEMENT

(a) Each Retail Establishment as defined in Section 1, above, located in the Town of Brookline shall comply with this by-law.

(1) If it is determined that a violation has occurred the ~~Officer~~ Director shall issue a warning notice to the Retail Establishment for the initial violation. (2) If an additional violation of this by-law has occurred within one year after a warning notice has been issued for an initial violation, the ~~Officer~~ Director shall issue a notice of violation and shall impose a penalty against the retail establishment.

(3) The penalty for each violation that occurs after the issuance of the warning notice shall be no more than:

A) \$50 for the first offense

B) \$100 for the second offense and all subsequent offenses. Payment of such fines may be enforced through civil action in the Brookline District Court. (4) No more than one (1) penalty shall be imposed upon a Retail Establishment within a seven (7) calendar day period.

(5) A Retail Establishment shall have fifteen (15) calendar days after the date that a notice of violation is issued to pay the penalty.

SECTION 8.33.4

All of the requirements set forth in this by-law shall take effect ~~December~~ July 1, 2013. In the event that compliance with the effective date of this by-law is not feasible for a food service establishment because of either unavailability of alternative checkout bags or economic hardship, the ~~Director~~ Officer may grant a waiver of not more than six months upon application of the owner or the owner's representative. The waiver may be extended for one (1) additional six-month period upon showing of continued infeasibility as set forth above.

Or take any other action relative thereto.